

**DS · MS WIRE ROPE**

Downstage wire rope, 3 runs x 2 pieces, pylon arms TOP / MID / LOW

DS**1 · What plugs in from the rack (one feeder per run, IN end of piece 1)**

Run	Where	Rack port	Feeder cable	Controller	px	sACN
DS1	TOP arm	NL4-1	NL4-1 single, 16/3 NL4: 3x 20 ft + 1x 10 ft + barrels (70 ft) arrives at the TOP arm	CTRL A out 1 192.168.41.41	369	41 to 43
DS2	MID arm	NL8-1 a	NL8-1 50 ft + 10 ft NL8 (16/6) + NL8MMX barrel, splitter OUTPUT 1 (8 ft tail) arrives at the MID arm (8 ft tail up)	CTRL A out 2 192.168.41.41	369	44 to 46
DS3	LOW arm	NL8-1 b	NL8-1 50 ft + 10 ft NL8 (16/6) + NL8MMX barrel, splitter OUTPUT 2 (2 ft tail) arrives at the LOW arm (at the splitter)	CTRL A out 3 192.168.41.41	369	47 to 49

2 · Pieces in hang order (label on the rope = BBDB name + IN / OUT). Every rope joint = NL4MMX barrel.

Label	Cut / pixels	IN end lands at	OUT end lands at
BBDB DS1-1 DS1 piece 1 of 2	30'0" 183 px · 41.1 to 42.39	IN RACK FEEDER NL4-1 (barrel to the feeder NL4)	OUT NJCT 1 (DSP, LX truss) MSWR-NJCT1 · 3fer Y3-01
BBDB DS1-2 DS1 piece 2 of 2	30'6" 186 px · 42.40 to 43.87	IN NJCT 1 (DSP, LX truss) MSWR-NJCT1 · 3fer Y3-01 leaving side	OUT NJCT 2 (DS end, backdrop truss) MSWR-NJCT2 · 2fer Y2-01
BBDB DS2-1 DS2 piece 1 of 2	30'0" 183 px · 44.1 to 45.39	IN RACK FEEDER NL8-1 a (barrel to the feeder NL4)	OUT NJCT 1 (DSP, LX truss) MSWR-NJCT1 · 3fer Y3-02
BBDB DS2-2 DS2 piece 2 of 2	30'6" 186 px · 45.40 to 46.87	IN NJCT 1 (DSP, LX truss) MSWR-NJCT1 · 3fer Y3-02 leaving side	OUT NJCT 2 (DS end, backdrop truss) MSWR-NJCT2 · 2fer Y2-02
BBDB DS3-1 DS3 piece 1 of 2	30'0" 183 px · 47.1 to 48.39	IN RACK FEEDER NL8-1 b (barrel to the feeder NL4)	OUT NJCT 1 (DSP, LX truss) MSWR-NJCT1 · 2fer Y2-03
BBDB DS3-2 DS3 piece 2 of 2	30'6" 186 px · 48.40 to 49.87	IN NJCT 1 (DSP, LX truss) MSWR-NJCT1 · 2fer Y2-03 leaving side	OUT NJCT 2 (DS end, backdrop truss)

3 · Injector columns on this section (power only; see KG3-BEA-PWR-01 for lengths)**PWR-NJCT 1** MSWR-NJCT1

DSP split · mid span · top rope 3'3" below the pickup · fed by LMG retractor, box feed 10 ft F to F

- **3fer Y3-01:** DS1-1 arriving, DS1-2 leaving · JMP-01 20 in jumper down to the next Wye
- **3fer Y3-02:** DS2-1 arriving, DS2-2 leaving · JMP-02 20 in jumper down to the next Wye
- **2fer Y2-03:** DS3-1 arriving, DS3-2 leaving

PWR-NJCT 2 MSWR-NJCT2

DS end · ropes terminate · top rope 3'3" below the pickup · fed by LMG retractor, box feed 10 ft F to F

- **2fer Y2-01:** DS1-2 arriving, rope terminates · JMP-01 20 in jumper down to the next Wye
- **2fer Y2-02:** DS2-2 arriving, rope terminates · STR-01 6 ft straight down
- **DS3-2** passes this column with no Wye (rope only).

Before it flies ☐ every label reads IN toward the rack feeder, OUT away from it ☐ barrel on every rope joint, no bare NL4s ☐ Wye input tail is the only male end at a column ☐ rings + safeties on every pick (RING-01) ☐ run test lit from the rack before trim

**US · US WIRE ROPE**

Upstage wire rope, 3 runs x 2 pieces, pylon arms TOP / MID / LOW

US**1 · What plugs in from the rack (one feeder per run, IN end of piece 1)**

Run	Where	Rack port	Feeder cable	Controller	px	sACN
US4	TOP arm	NL4-2	NL4-2 single, 16/3 NL4: 3x 20 ft + 1x 10 ft + barrels (70 ft) arrives at the TOP arm	CTRL B out 2 192.168.41.42	307	58 to 59
US5	MID arm	NL8-2 a	NL8-2 50 ft + 10 ft NL8 (16/6) + NL8MMX barrel, splitter OUTPUT 1 (8 ft tail) arrives at the MID arm (8 ft tail up)	CTRL B out 3 192.168.41.42	307	60 to 61
US6	LOW arm	NL8-2 b	NL8-2 50 ft + 10 ft NL8 (16/6) + NL8MMX barrel, splitter OUTPUT 2 (2 ft tail) arrives at the LOW arm (at the splitter)	CTRL B out 4 192.168.41.42	307	62 to 63

2 · Pieces in hang order (label on the rope = BBDB name + IN / OUT). Every rope joint = NL4MMX barrel.

Label	Cut / pixels	IN end lands at	OUT end lands at
BBDB US4-1 US4 piece 1 of 2	28'4" 173 px · 58.1 to 59.9	IN RACK FEEDER NL4-2 (barrel to the feeder NL4)	OUT NJCT 3 (USP, scenic truss) USWR-NJCT3 · 3fer Y3-01
BBDB US4-2 US4 piece 2 of 2	21'10" 134 px · 59.10 to 59.411	IN NJCT 3 (USP, scenic truss) USWR-NJCT3 · 3fer Y3-01 leaving side	OUT NJCT 4 (US end, scenic truss) USWR-NJCT4 · 2fer Y2-01
BBDB US5-1 US5 piece 1 of 2	28'4" 173 px · 60.1 to 61.9	IN RACK FEEDER NL8-2 a (barrel to the feeder NL4)	OUT NJCT 3 (USP, scenic truss) USWR-NJCT3 · 3fer Y3-02
BBDB US5-2 US5 piece 2 of 2	21'10" 134 px · 61.10 to 61.411	IN NJCT 3 (USP, scenic truss) USWR-NJCT3 · 3fer Y3-02 leaving side	OUT NJCT 4 (US end, scenic truss) USWR-NJCT4 · 2fer Y2-02
BBDB US6-1 US6 piece 1 of 2	28'4" 173 px · 62.1 to 63.9	IN RACK FEEDER NL8-2 b (barrel to the feeder NL4)	OUT NJCT 3 (USP, scenic truss) USWR-NJCT3 · 2fer Y2-03
BBDB US6-2 US6 piece 2 of 2	21'10" 134 px · 63.10 to 63.411	IN NJCT 3 (USP, scenic truss) USWR-NJCT3 · 2fer Y2-03 leaving side	OUT NJCT 4 (US end, scenic truss)

3 · Injector columns on this section (power only; see KG3-BEA-PWR-01 for lengths)**PWR-NJCT 3** USWR-NJCT3

USP split · mid span · top rope 3'5" below the pickup · fed by LMG retractor, box feed 10 ft F to F

- **3fer Y3-01:** US4-1 arriving, US4-2 leaving · JMP-01 20 in jumper down to the next Wye
- **3fer Y3-02:** US5-1 arriving, US5-2 leaving · JMP-02 20 in jumper down to the next Wye
- **2fer Y2-03:** US6-1 arriving, US6-2 leaving

PWR-NJCT 4 USWR-NJCT4

US end · ropes terminate · top rope 3'5" below the pickup · fed by LMG retractor, box feed 10 ft F to F

- **2fer Y2-01:** US4-2 arriving, rope terminates · JMP-01 20 in jumper down to the next Wye
- **2fer Y2-02:** US5-2 arriving, rope terminates · STR-01 6 ft straight down
- **US6-2** passes this column with no Wye (rope only).

Before it flies ☐ every label reads IN toward the rack feeder, OUT away from it ☐ barrel on every rope joint, no bare NL4s ☐ Wye input tail is the only male end at a column ☐ rings + safeties on every pick (RING-01) ☐ run test lit from the rack before trim

**AUD · DS ROPE 1 (AUDIENCE PICKUPS)**

Audience ropes on chain motors AP1 / AP2 / AP3, 2 runs x 3 pieces

AUD**1 · What plugs in from the rack (one feeder per run, IN end of piece 1)**

Run	Where	Rack port	Feeder cable	Controller	px	sACN
AUD1	upper rope	NL8-5 a	NL8-5 50 ft + 25 ft NL8 (16/6) + NL8MMX barrel, splitter OUTPUT 1 (8 ft tail) arrives at the AUD1 via the 10 ft NL4 jumper	CTRL A out 4 192.168.41.41	568	50 to 53
AUD2	lower rope	NL8-5 b	NL8-5 50 ft + 25 ft NL8 (16/6) + NL8MMX barrel, splitter OUTPUT 2 (2 ft tail) arrives at the AUD2 at the splitter	CTRL B out 1 192.168.41.42	575	54 to 57

2 · Pieces in hang order (label on the rope = BBDB name + IN / OUT). Every rope joint = NL4MMX barrel.

Label	Cut / pixels	IN end lands at	OUT end lands at
BBDB AUD1-1 AUD1 piece 1 of 3	26'2" 160 px · 50.1 to 50.480	IN RACK FEEDER NL8-5 a (barrel to the feeder NL4)	OUT NJCT 5 (AP1 motor) DS1-NJCT5 · 3fer Y3-01
BBDB AUD1-2 AUD1 piece 2 of 3	33'4" 204 px · 50.481 to 52.72	IN NJCT 5 (AP1 motor) DS1-NJCT5 · 3fer Y3-01 leaving side	OUT NJCT 6 (AP2 motor) DS1-NJCT6 · 3fer Y3-01
BBDB AUD1-3 AUD1 piece 3 of 3	33'5" 204 px · 52.73 to 53.174	IN NJCT 6 (AP2 motor) DS1-NJCT6 · 3fer Y3-01 leaving side	OUT NJCT 7 (AP3 motor) DS1-NJCT7 · 2fer Y2-01
BBDB AUD2-1 AUD2 piece 1 of 3	27'2" 166 px · 54.1 to 54.498	IN RACK FEEDER NL8-5 b (barrel to the feeder NL4)	OUT NJCT 5 (AP1 motor) DS1-NJCT5 · 2fer Y2-02
BBDB AUD2-2 AUD2 piece 2 of 3	33'7" 205 px · 54.499 to 56.93	IN NJCT 5 (AP1 motor) DS1-NJCT5 · 2fer Y2-02 leaving side	OUT NJCT 6 (AP2 motor) DS1-NJCT6 · 2fer Y2-02
BBDB AUD2-3 AUD2 piece 3 of 3	33'5" 204 px · 56.94 to 57.195	IN NJCT 6 (AP2 motor) DS1-NJCT6 · 2fer Y2-02 leaving side	OUT NJCT 7 (AP3 motor)

3 · Injector columns on this section (power only; see KG3-BEA-PWR-01 for lengths)**PWR-NJCT 5 · AP1** DS1-NJCT5

Audience Pickup 1 · mid span · top rope 3'5" below the pickup · fed by KG3 fixed drop, 50 ft feed

- **3fer Y3-01:** AUD1-1 arriving, AUD1-2 leaving · JMP-01 64 in jumper down to the next Wye
- **2fer Y2-02:** AUD2-1 arriving, AUD2-2 leaving

PWR-NJCT 6 · AP2 DS1-NJCT6

Audience Pickup 2 · mid span · top rope 3'5" below the pickup · fed by KG3 fixed drop, 50 ft feed

- **3fer Y3-01:** AUD1-2 arriving, AUD1-3 leaving · JMP-01 104 in jumper down to the next Wye
- **2fer Y2-02:** AUD2-2 arriving, AUD2-3 leaving

PWR-NJCT 7 · AP3 DS1-NJCT7

Audience Pickup 3 · ropes terminate · top rope 3'5" below the pickup · fed by KG3 fixed drop, 50 ft feed

- **2fer Y2-01:** AUD1-3 arriving, rope terminates · STR-01 15 ft straight down
- **AUD2-3** passes this column with no Wye (rope only).

Before it flies ☐ every label reads IN toward the rack feeder, OUT away from it ☐ barrel on every rope joint, no bare NL4s ☐ Wye input tail is the only male end at a column ☐ rings + safeties on every pick (RING-01) ☐ run test lit from the rack before trim



USR1 · US 1 RISER

Upstage riser 1, 3 single-piece runs, no injector (rack power only)

USR1

1 · What plugs in from the rack (one feeder per run, IN end of piece 1)

Run	Where	Rack port	Feeder cable	Controller	px	sACN
USR1-1	TOP arm	NL4-3	NL4-3 single, 16/3 NL4: 3x 20 ft + 1x 10 ft + barrels (70 ft) arrives at the TOP arm	CTRL C out 1 192.168.41.43	98	64
USR1-2	MID arm	NL8-3 a	NL8-3 50 ft + 10 ft NL8 (16/6) + NL8MMX barrel, splitter OUTPUT 1 (8 ft tail) arrives at the MID arm (8 ft tail up)	CTRL C out 2 192.168.41.43	98	65
USR1-3	LOW arm	NL8-3 b	NL8-3 50 ft + 10 ft NL8 (16/6) + NL8MMX barrel, splitter OUTPUT 2 (2 ft tail) arrives at the LOW arm (at the splitter)	CTRL C out 3 192.168.41.43	98	66

2 · Pieces in hang order (label on the rope = BBDB name + IN / OUT). Every rope joint = NL4MMX barrel.

Label	Cut / pixels	IN end lands at	OUT end lands at
BBDB USR1-1 USR1-1 piece 1 of 1	16'0" 98 px · 64.1 to 64.294	IN RACK FEEDER NL4-3 (barrel to the feeder NL4)	OUT far end (no injector)
BBDB USR1-2 USR1-2 piece 1 of 1	16'0" 98 px · 65.1 to 65.294	IN RACK FEEDER NL8-3 a (barrel to the feeder NL4)	OUT far end (no injector)
BBDB USR1-3 USR1-3 piece 1 of 1	16'0" 98 px · 66.1 to 66.294	IN RACK FEEDER NL8-3 b (barrel to the feeder NL4)	OUT far end (no injector)

3 · Power

No injector column on the risers: each run is under 17 ft and is powered from the rack through its own feeder. Nothing else to plug in.

Before it flies ☐ every label reads IN toward the rack feeder, OUT away from it ☐ barrel on every rope joint, no bare NL4s ☐ Wye input tail is the only male end at a column ☐ rings + safeties on every pick (RING-01) ☐ run test lit from the rack before trim



USR2 · US 2 RISER

Upstage riser 2, 3 single-piece runs, no injector (rack power only)

USR2

1 · What plugs in from the rack (one feeder per run, IN end of piece 1)

Run	Where	Rack port	Feeder cable	Controller	px	sACN
USR2-1	TOP arm	NL4-4	NL4-4 single, 16/3 NL4: 3x 20 ft + 1x 10 ft + barrels (70 ft) arrives at the TOP arm	CTRL D out 1 192.168.41.44	100	67
USR2-2	MID arm	NL8-4 a	NL8-4 50 ft + 10 ft NL8 (16/6) + NL8MMX barrel, splitter OUTPUT 1 (8 ft tail) arrives at the MID arm (8 ft tail up)	CTRL D out 2 192.168.41.44	100	68
USR2-3	LOW arm	NL8-4 b	NL8-4 50 ft + 10 ft NL8 (16/6) + NL8MMX barrel, splitter OUTPUT 2 (2 ft tail) arrives at the LOW arm (at the splitter)	CTRL D out 3 192.168.41.44	100	69

2 · Pieces in hang order (label on the rope = BBDB name + IN / OUT). Every rope joint = NL4MMX barrel.

Label	Cut / pixels	IN end lands at	OUT end lands at
BBDB USR2-1 USR2-1 piece 1 of 1	16'4" 100 px · 67.1 to 67.300	IN RACK FEEDER NL4-4 (barrel to the feeder NL4)	OUT far end (no injector)
BBDB USR2-2 USR2-2 piece 1 of 1	16'4" 100 px · 68.1 to 68.300	IN RACK FEEDER NL8-4 a (barrel to the feeder NL4)	OUT far end (no injector)
BBDB USR2-3 USR2-3 piece 1 of 1	16'4" 100 px · 69.1 to 69.300	IN RACK FEEDER NL8-4 b (barrel to the feeder NL4)	OUT far end (no injector)

3 · Power

No injector column on the risers: each run is under 17 ft and is powered from the rack through its own feeder. Nothing else to plug in.

Before it flies ☐ every label reads IN toward the rack feeder, OUT away from it ☐ barrel on every rope joint, no bare NL4s ☐ Wye input tail is the only male end at a column ☐ rings + safeties on every pick (RING-01) ☐ run test lit from the rack before trim



RACK · PXL CTRL RACK

SKB 4U rolling rack, OFFSTAGE (~30 ft ground run). Lid marked INPUT / OUTPUT faces the cable; lid marked ADVATEK ACCESS faces the controllers.



1 · Inputs (production supplies both)

Jack	What	Note
IN · powerCON TRUE1	120 V AC, one 20 A circuit	2x Mean Well UHP-1500-24 inside, about 12.9 A at full white. TRUE1 THRU is a pass-through only.
IN · etherCON x2	sACN from the console network	Controllers CTRL A to D = 192.168.41.41 to .44, /24. Spare CTRL E (boxed) = .45. Universes 41 to 69 live.

2 · Outputs (14 circuits on 5 NL8 + 4 NL4). NL8 = Pixel Data + Power Cable, 2 circuits (a / b).

Port	Run	Controller	IP	px	sACN	Cable on this port
OUT NL8-1 a	DS2	CTRL A out 2	192.168.41.41	369	44 to 46	NL8-1 50 ft + 10 ft NL8 (16/6) + NL8MMX barrel, splitter OUTPUT 1 (8 ft tail)
OUT NL8-1 b	DS3	CTRL A out 3	192.168.41.41	369	47 to 49	NL8-1 50 ft + 10 ft NL8 (16/6) + NL8MMX barrel, splitter OUTPUT 2 (2 ft tail)
OUT NL8-2 a	US5	CTRL B out 3	192.168.41.42	307	60 to 61	NL8-2 50 ft + 10 ft NL8 (16/6) + NL8MMX barrel, splitter OUTPUT 1 (8 ft tail)
OUT NL8-2 b	US6	CTRL B out 4	192.168.41.42	307	62 to 63	NL8-2 50 ft + 10 ft NL8 (16/6) + NL8MMX barrel, splitter OUTPUT 2 (2 ft tail)
OUT NL8-3 a	USR1-2	CTRL C out 2	192.168.41.43	98	65	NL8-3 50 ft + 10 ft NL8 (16/6) + NL8MMX barrel, splitter OUTPUT 1 (8 ft tail)
OUT NL8-3 b	USR1-3	CTRL C out 3	192.168.41.43	98	66	NL8-3 50 ft + 10 ft NL8 (16/6) + NL8MMX barrel, splitter OUTPUT 2 (2 ft tail)
OUT NL8-4 a	USR2-2	CTRL D out 2	192.168.41.44	100	68	NL8-4 50 ft + 10 ft NL8 (16/6) + NL8MMX barrel, splitter OUTPUT 1 (8 ft tail)
OUT NL8-4 b	USR2-3	CTRL D out 3	192.168.41.44	100	69	NL8-4 50 ft + 10 ft NL8 (16/6) + NL8MMX barrel, splitter OUTPUT 2 (2 ft tail)
OUT NL8-5 a	AUD1	CTRL A out 4	192.168.41.41	568	50 to 53	NL8-5 50 ft + 25 ft NL8 (16/6) + NL8MMX barrel, splitter OUTPUT 1 (8 ft tail)
OUT NL8-5 b	AUD2	CTRL B out 1	192.168.41.42	575	54 to 57	NL8-5 50 ft + 25 ft NL8 (16/6) + NL8MMX barrel, splitter OUTPUT 2 (2 ft tail)
OUT NL4-1	DS1	CTRL A out 1	192.168.41.41	369	41 to 43	NL4-1 single, 16/3 NL4: 3x 20 ft + 1x 10 ft + barrels (70 ft)
OUT NL4-2	US4	CTRL B out 2	192.168.41.42	307	58 to 59	NL4-2 single, 16/3 NL4: 3x 20 ft + 1x 10 ft + barrels (70 ft)
OUT NL4-3	USR1-1	CTRL C out 1	192.168.41.43	98	64	NL4-3 single, 16/3 NL4: 3x 20 ft + 1x 10 ft + barrels (70 ft)
OUT NL4-4	USR2-1	CTRL D out 1	192.168.41.44	100	67	NL4-4 single, 16/3 NL4: 3x 20 ft + 1x 10 ft + barrels (70 ft)

Before power-up

☐ all 9 output cables landed on the port that matches the RUN + TOP tape on the cable

☐ splitters: OUTPUT 1 up, OUTPUT 2 at the arm

☐ network cable in, link lights on all 4 Advateks

☐ TRUE1 last

☐ run test from the rack (bea.local) before anything leaves the deck